

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-19 (Cancelled)

20. (Currently amended) An isolated antibody against a protein selected from the group consisting of:

(i) a protein ~~comprising~~ consisting of the amino acid sequence of residues 1-231 of SEQ ID NO: 2, and having serine protease activity; and

~~(ii) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence complementary to nucleotides 110-802 of SEQ ID NO: 1 under stringent conditions, and having the same serine protease activity as that of the protein (i);~~

[[(iii)]] (ii) a protein ~~comprising~~ consisting of the amino acid sequence of residues 1-231 of SEQ ID NO: 4, and having serine protease activity[[;]]

~~(iv) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 132 to 824 SEQ ID NO: 3 under stringent conditions, and having the same serine protease activity as that of the protein (iii); and~~

~~(v) a modified derivative of proteins (i) to (iv).~~

21. (Original) The antibody according to claim 20, which is a polyclonal antibody, a monoclonal antibody, or a peptide antibody.

22. (Currently amended) A process for producing a monoclonal antibody against a protein selected from the group consisting of:

(i) a protein ~~comprising~~ consisting of the amino acid sequence of residues 1-231 of SEQ ID NO: 2, and having serine protease activity; and

~~(ii) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 110-802 of SEQ ID NO: 1 under stringent conditions, and having the same serine protease activity as that of the protein (i);~~

[[~~(iii)~~]] (ii) a protein ~~comprising~~ consisting of the amino acid sequence of residues 1-231 of SEQ ID NO: 4, and having serine protease activity[[;]] ,

~~(iv) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 132 to 824 SEQ ID NO: 3 under stringent conditions, and having the same serine protease activity as that of the protein (iii); and~~

~~(v) a modified derivative of proteins (i) to (iv),~~

which comprises:

administering the protein ~~according to claim 35~~ (i) or (ii) or a fragment thereof to a warm-blooded animal other than a human being;

collecting spleen or lymph node of said warm-blooded animal;
and

fusing the antibody producing cells contained therein with myeloma cells to prepare a monoclonal antibody producing hybridoma.

23. (Currently amended) A method for determining a presence or an amount of a protein selected from the group consisting of:

(i) a protein ~~comprising~~ consisting of the amino acid sequence of residues 1-231 of SEQ ID NO: 2, and having serine protease activity; and

~~(ii) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 110-802 of SEQ ID NO: 1 under stringent conditions, and having the same serine protease activity as that of the protein (i);~~

[[(iii)]] (ii) a protein ~~comprising~~ consisting of the amino acid sequence of residues 1-231 of SEQ ID NO: 4, and having serine protease activity[[;]] ,

~~(iv) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 132 to 824 SEQ ID NO: 3 under stringent conditions, and having the same serine protease activity as that of the protein (iii); and~~

~~(v) a modified derivative of proteins (i) to (iv);~~
in a specimen wherein said method comprises immunologically binding an antibody against the protein or a fragment thereof in a sample and determining the presence or amount of the protein or fragment thereof.

24. (Currently amended) A method for determining a presence or an amount of hBSSP5 or a fragment thereof in a specimen which comprises reacting a monoclonal antibody or a polyclonal antibody against[[:]] a protein consisting of the amino acid sequence of

residues 1-231 of SEQ ID NO: 2, and having serine protease activity
with hBSSP5 or a fragment thereof in the specimen to detect a sandwich
complex produced

~~(i) a protein comprising the amino acid sequence of residues~~
~~1-231 of SEQ ID NO: 2, and having serine protease activity;~~

~~(ii) a protein encoded by a nucleotide sequence which~~
~~hybridizes to a nucleotide sequence of bases 110-802 of SEQ ID NO: 1~~
~~under stringent conditions, and having the same serine protease~~
~~activity as that of the protein (i); or~~

~~(iii) a modified derivative of the protein (i) or (ii) and a~~
~~labeled antibody against the protein (i), (ii) or (iii) with hBSSP5 or~~
~~a fragment thereof in the specimen to detect a sandwich complex~~
~~produced.~~

25. (Currently amended) A method for determining a
presence or an amount of hBSSP5 or a fragment thereof in a specimen
which comprises reacting a monoclonal antibody or a polyclonal antibody
against~~[[:]]~~ a protein consisting of the amino acid sequence of
residues 1-231 of SEQ ID NO: 2, and having serine protease activity
with labeled hBSSP5 and hBSSP5 or a fragment thereof in the specimen
competitively to detect an amount of hBSSP5 or a fragment thereof in
the specimen based on an amount of the labeled hBSSP5 reacted with the
antibody

~~(i) a protein comprising the amino acid sequence of residues~~
~~1-231 of SEQ ID NO: 2, and having serine protease activity;~~

~~(ii) a protein encoded by a nucleotide sequence which~~
~~hybridizes to a nucleotide sequence of bases 110-802 of SEQ ID NO: 1~~

~~under stringent conditions, and having the same serine protease-
activity as that of the protein (i); or~~

~~(iii) a modified derivative of the protein (i) or (ii) with
labeled hBSSP5 and hBSSP5 or a fragment thereof in the specimen
competitively to detect an amount of hBSSP5 or a fragment thereof in
the specimen based on an amount of the labeled hBSSP5 reacted with the
antibody.~~

26. (Previously presented) The method according to claim
23, wherein the specimen is a body fluid.

Claims 27-31 (Cancelled)

32. (Currently amended) A method for detecting
pancreatitis which comprises measuring concentration, in blood or
urine, of a protein selected from the group consisting of:

(i) a protein ~~comprising~~ consisting of the amino acid
sequence of residues 1-231 of SEQ ID NO: 2, and having serine protease
activity; and

~~(ii) a protein encoded by a nucleotide sequence which
hybridizes to a nucleotide sequence of bases 110-802 of SEQ ID NO: 1
under stringent conditions, and having the same serine protease-
activity as that of the protein (i);~~

[[(iii)]] (ii) a protein ~~comprising~~ consisting of the amino
acid sequence of residues 1-231 of SEQ ID NO: 4, and having serine
protease activity[[;]] .

~~(iv) a protein encoded by a nucleotide sequence which
hybridizes to a nucleotide sequence of bases 132 to 824 SEQ ID NO: 3~~

~~under stringent conditions, and having the same serine protease activity as that of the protein (iii); and~~

~~(v) a modified derivative of proteins (i) to (iv).~~

33. (Currently amended) A composition which comprises an antibody against a protein selected from the group consisting of:

(i) a protein having consisting of the amino acid sequence ~~composed of 231 amino acids represented by the 1st to 231st amino acids of residues 1-231~~ of SEQ ID NO: 2, and having serine protease activity; and

~~(ii) a protein encoded by nucleotides hybridizable to nucleotides complementary to a nucleotide sequence represented by the 110th to 802nd bases of SEQ ID NO: 1 under stringent conditions, and having the same serine protease activity as that of the protein (i);~~

[[(iii)]] (ii) a protein having consisting of the amino acid sequence ~~composed of 231 amino acids represented by the 1st to 231st amino acids of residues 1-231~~ of SEQ ID NO: 4, and having serine protease activity[[;]] ,

~~(iv) a protein encoded by nucleotides hybridizable to nucleotides complementary to a nucleotide sequence represented by the 132nd to 824th bases of SEQ ID NO: 3 under stringent conditions, and having the same serine protease activity as that of the protein (iii);~~

~~(v) a modified derivative of proteins (i) to (iv);~~
and a pharmaceutically acceptable carrier.

Claim 34-37 (Cancelled)

38. (Previously presented) The method according to claim 24, wherein the specimen is a body fluid.

39. (Previously presented) The method according to claim 25, wherein the specimen is a body fluid.

Claims 40 and 41 (Cancelled)

42. (Currently amended) An immunohistochemical method for detecting a protein as a diagnostic marker for a certain disease, wherein the protein is selected from the group consisting of:

(i) a protein ~~comprising~~ consisting of the amino acid sequence of residues 1-231 of SEQ ID NO: 2, and having serine protease activity; and

~~(ii) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 110-802 of SEQ ID NO: 1 under stringent conditions, and having the same serine protease activity as that of the protein (i);~~

[[(iii)]] (ii) a protein ~~comprising~~ consisting of the amino acid sequence of residues 1-231 of SEQ ID NO: 4, and having serine protease activity[[;]] ,

~~(iv) a protein encoded by a nucleotide sequence which hybridizes to a nucleotide sequence of bases 132 to 824 SEQ ID NO: 3 under stringent conditions, and having the same serine protease activity as that of the protein (iii); and~~

~~(v) a modified derivative of proteins (i) to (iv)~~

which comprises the steps of:

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- a) taking a tissue specimen from a subject suspected of suffering from the disease;
- b) contacting the antibody with the tissue specimen; and
- c) detecting the presence of the diagnostic protein maker in the tissue specimen by evaluating immunoreactivity between the antibody and said tissue specimen.

Claim 43 (Cancelled)